

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

ELBIT SYSTEMS LAND AND C4I LTD.,	§	
ELBIT SYSTEMS OF AMERICA, LLC,	§	
	§	CIVIL ACTION NO. 2:15-CV-00037-RWS
Plaintiffs,	§	
	§	
v.	§	
	§	
HUGHES NETWORK SYSTEMS, LLC,	§	
	§	
Defendant.	§	

**FINAL JURY INSTRUCTIONS**

**1. Introduction**

MEMBERS OF THE JURY:

You have now heard the evidence in this case, and I will instruct you now on the law that you must apply. It is your duty to follow the law as I give it to you. On the other hand, you, the jury, are the sole judges of the facts. Do not consider any statement that I may have made during the trial or make in these instructions as an indication that I have any opinion about the facts of the case.

After I instruct you on the law, the attorneys will have an opportunity to make their closing arguments. Statements and argument of the attorneys are not evidence and are not instructions on the law. They are intended only to assist you in understanding the evidence and what the parties' contentions are.

**2. General Instructions**

**2.1 Verdict Form**

A verdict form has been prepared for you. You will take this form with you to the jury room and when you have reached a unanimous agreement as to your verdict, you will have your

foreperson fill in, date it and sign the form. Answer each question on the verdict form from the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

## **2.2 Considering Witness Testimony**

In determining whether any fact has been proven in this case, you may, unless otherwise instructed, consider the testimony of all witnesses, regardless of who may have called them, and all exhibits received into evidence, regardless of who may have produced or introduced them. You the jurors are the sole judges of the credibility of all the witnesses and the weight and effect of all evidence. By the Court allowing testimony or other evidence to be introduced over the objection of an attorney, the Court did not indicate any opinion as to the weight or effect of such evidence.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact or whether there was evidence that some other time the witness said or did something or failed to say or do something that was different from the testimony the witness gave before you during trial.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it because people may forget some things or remember other things inaccurately. So if a witness has made a misstatement, you need to consider whether that misstatement was an intentional falsehood or simply an innocent lapse of memory. And the significance of that may depend on whether it has to do with an important fact or with only an unimportant detail. In deciding whether to accept or rely upon the testimony of any witness, you may also consider any bias of the witness.

### **2.3 How to Examine the Evidence**

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked to a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness testimony may be presented, under oath, in the form of a deposition. Before this trial, the attorneys representing the parties in this case questioned these deposition witnesses under oath. A court reporter was present and recorded the testimony. Deposition testimony is entitled to the same consideration as testimony given by a witness in person from the witness stand. You should judge the credibility of and weigh the importance of deposition testimony to the best of your ability just as if the witness had testified in court in person.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case. The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

### **2.4 Direct and Circumstantial Evidence**

Some of you may have heard the terms “direct evidence” and “circumstantial evidence.” Direct evidence is simply evidence like the testimony of an eyewitness which, if you believe it, directly proves a fact. Circumstantial evidence is simply a chain of circumstances that indirectly proves a fact. If someone walked into the courtroom wearing a raincoat covered with drops of

water and carrying a wet umbrella, that would be circumstantial evidence from which you could conclude that it was raining.

It is your job to decide how much weight to give the direct and circumstantial evidence. As a general rule, the law makes no distinction between the weights that you should give to direct and circumstantial evidence, nor does it say that one is any better evidence than the other, but simply requires that you find the facts from all the evidence, both direct and circumstantial, and give it the weight you believe it deserves.

## **2.5 Objections to Evidence**

Attorneys representing clients in courts such as this one have an obligation to assert objections when they believe testimony or evidence is being offered that is contrary to the rules of evidence. The essence of a fair trial is that it be conducted pursuant to the rules of evidence and that your verdict be based only on legally admissible evidence. So, you should not be influenced by the objection or by the Court's ruling on it. If the objection is sustained, then ignore the question. If the objection is overruled, then you may treat the answer to that question just as you would treat the answer to any other question.

During the trial, I may not have let you hear the answers to some of the questions the lawyers asked. I also may have ruled that you could not see some of the exhibits the lawyers wanted you to see. And sometimes I may have ordered you to disregard things that you saw or heard. You must completely ignore all of these things as I have instructed. Do not speculate about what a witness might have said or what an exhibit might have shown. These things are not evidence, and you are bound by your oath not to let them influence your decision in any way.

At times during the trial it was necessary for the Court to talk with the lawyers here at the bench out of your hearing, or by calling a recess and talking to them when you were out of the

courtroom. This happened because often during a trial, something comes up that does not involve the jury. You should not speculate on what was said during such discussions that took place outside of your presence.

## **2.6 Demonstrative Exhibits**

Certain exhibits shown to you are illustrations of the evidence, but are not themselves evidence. We call these types of exhibits “demonstrative exhibits.” Demonstrative exhibits are a party’s description, picture, or model to describe something involved in this trial. If your recollection of the evidence differs from the demonstrative exhibit, rely on your recollection.

## **2.7 Expert Witnesses**

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field, he or she is called an expert witness, and is permitted to state his or her opinion on technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether the witness’s testimony is believable or not, whether it is supported by the evidence, and whether to rely upon it.

## **3. Contentions of the Parties**

As I did at the start of the case, I will first give you a summary of each side’s contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

Plaintiffs, Elbit Systems Land and C4I and Elbit Systems of America (collectively, “Elbit”), seek money damages from Defendant Hughes Network Systems (“Hughes”) for allegedly infringing certain claims of U.S. Patent No. 6,240,073 (referred to as the “’073 Patent”) and U.S. Patent No. 7,245,874 (referred to as the “’874 Patent”). Plaintiffs contend that the Hughes HN,

HX, and HT (sometimes also referred to as Jupiter) satellite systems infringe claims 2, 3, and 4 of the '073 Patent and that the Hughes Cellular Backhaul Solution infringes claims 1, 8 and 9 of the '874 Patent. Collectively, these patents are referred to as the “patents- in-suit” and these claims are referred to as the “asserted claims.”

Elbit contends that Hughes has directly infringed the asserted claims of the '073 Patent by making, using, selling, or offering for sale the Hughes HN, HX, and HT satellite systems in the United States. Elbit also contends that Hughes has directly infringed the asserted claims of the '874 Patent by making, using, selling, or offering for sale the Hughes Cellular Backhaul Solution. Elbit further contends that Hughes has induced infringement of the asserted claims of the patents-in-suit by others, such as its customers, and contributed to the infringement of the asserted claims of the patents-in-suit by its customers. Elbit further contends that Hughes' infringement of the patents-in-suit has been willful.

In response to Elbit's contentions, Hughes denies that it has infringed the asserted claims of the patents-in-suit either directly or by induced or contributory infringement. Hughes denies that any infringement has been willful. Hughes further denies that the Plaintiffs are entitled to any damages. Hughes also contends the asserted claims of the '073 patent are invalid because they are anticipated or rendered obvious by the prior art. Hughes contends that at the time of the alleged invention, prior art existed that disclosed every element of the asserted claims. Hughes also contends that the '073 Patent is invalid because, before the patentee's conception of the claimed invention, the invention was made in this country by another (by Hughes), who did not abandon, suppress, or conceal it. Finally, Hughes contends the asserted claims of the '073 Patent are invalid for lack of written description.

Your job is to decide whether Hughes has infringed the asserted claims of the patents-in-suit, and whether the asserted claims of the '073 patent are invalid. If you decide that any asserted claim has been infringed and is not invalid, you will then need to decide the amount of money damages to be awarded to Elbit compensate them for the infringement, if any.

You will also need to make a finding as to whether the infringement was willful. If you decide that any infringement was willful, that decision should not affect any damages award you make. I will take willfulness into account later.

#### **4. Burdens of Proof**

Facts must be proved by a required standard of evidence known as the burden of proof.

You've heard about it, I'm sure, from television in criminal cases. There's a reference to proof beyond a reasonable doubt. That does not apply in a civil case like this. In a patent case like this one, there are two burdens of proof that you will apply: The preponderance of the evidence standard and the clear and convincing evidence standard.

The Plaintiff, Elbit, must prove its claims of patent infringement and damages by a preponderance of the evidence.

When a party has the burden of proof by a preponderance of the evidence, it means that you must be persuaded that what the party seeks to prove is more probably true than not true.

If you put the evidence for and against the party who must prove the fact on opposite sides of the scale, the preponderance of the evidence requires that the scale tip somewhat toward the party who has the burden of proof.

Now, Hughes has the burden of proving invalidity by clear and convincing evidence. That means evidence that produces in your mind a firm conviction or belief as to the matter at issue.

Although proof to a certainty is not required, the clear and convincing standard requires a greater degree of persuasion than is necessary for the preponderance of the evidence standard.

If the proof establishes in your mind in a firm belief or conviction, then the clear and convincing evidence standard has been met.

#### **4.1 No Inference from Filing Suit**

The fact that a plaintiff brought a lawsuit in this Court seeking damages creates no inference that the plaintiff is entitled to a judgment. The act of making a claim in a lawsuit, by itself, does not in any way tend to establish that claim and is not evidence.

### **5. [Intentionally Left Blank]**

### **6. Patent Claims**

#### **6.1 Role of Patent Claims**

Before you can decide many of the issues in this case, you'll need to understand the role of the patent "claims."

Patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims themselves that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it were a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends upon what each of its claims cover.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid. The law says



that it's my role to define the terms of the claims, and it's your role to apply these definitions to the issues that you are asked to decide in this case.

Therefore, as I explained to you at the start of the case, I have determined the meaning of certain claim terms at issue in this case and I have provided you those definitions in Appendix A. You must accept the definitions of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including infringement and validity. The claim language I have not interpreted for you is to be given its ordinary and accustomed meaning as understood by one of ordinary skill in the art.

## **6.2 What a Claim Covers**

I will now explain how a patent claim defines what it covers. A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device or system satisfies each of these requirements, then it is covered by the claim. In patent law, the requirements of a claim are often referred to as "claim elements" or "claim limitations." There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim-by-claim. In patent law, the requirements of a claim are often referred to as "claim elements" or "claim limitations."

When a thing, such as a device, product, or system, meets all of the requirements of a claim, the claim is said to "cover" that thing, and that thing is said to "fall" within the scope of that claim. In other words, a claim covers a feature, product, or system where each of the claim elements or limitations is present in that device, product, or system. Conversely, if the device, product, or system meets only some, but not all, of the claim elements or limitations, then that device, product, or system is not covered by the claim.

By understanding the meaning of the words in a claim and by understanding that the words in a claim set forth the requirements that a product must meet in order to be covered by that claim, you will be able to understand the scope of coverage for each claim. Once you understand what each claim covers, then you are prepared to decide the issues that you will be asked to decide, such as infringement and invalidity.

### **6.3 Claim Interpretation**

I will now explain to you the meaning of some of the words of the claims in this case. In doing so, I will explain some of the requirements of the claims. As I have previously instructed you, you must accept my definition of these words in the claims as correct. For any words in the claim for which I have not provided you with a definition, you should apply their common meaning. You should not take my definition of the language of the claims as an indication that I have a view regarding how you should decide the issues that you are being asked to decide, such as infringement and validity. These issues are yours to decide.

Now, in some constructions I will refer to the structure required by the term as being described in a portion of the patent identified by column and line number, and/or in a Figure of the patent. In your notebook, you have a copy of the patent that has the same column and line number, as well as the Figures, to which I am referring. You will also find another copy of my definitions as Appendix A to this charge. I will now turn to Appendix A and read the claim terms and the Court's constructions. You can follow along from your juror notebook if you would like.

### **6.4 {Intentionally Left Blank}**

### **6.5 Independent and Dependent Claims**

This case involves two types of patent claims: Independent claims and dependent claims. An "independent claim" sets forth all of the requirements that must be met in order to be covered

by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, for example, claim 1 of the '874 Patent is an independent claim.

Other claims in the case are “dependent claims.” A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this case, for example, claim 8 of the '874 Patent depends from claim 1. In this way, the claim “depends” on another claim. A dependent claim incorporates all the requirements or parts of the claim to which it refers. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers. A product that meets all of the requirements of both the dependent claim and the claims to which it refers is covered by that dependent claim.

#### **6.6 Open-Ended or “Comprising” Claims**

The beginning portion, or preamble, to some of the claims uses the word “comprising.” “Comprising” and “comprises” mean “including or containing but not limited to.” Thus, if you decide that an accused product includes all the requirements in that claim, the claim is infringed.

#### **6.7 “Means-plus-function” Claims**

The asserted claims of the '073 Patent have several limitations phrased as a “means for” performing a function. This “means for” phrase has a special meaning in patent law. It is called a “means-plus-function” requirement. These limitations do not cover all of the structures that could perform the functions set forth in the claim. Instead, each limitation covers a structure or a set of structures that performs that function and that is either identical or “equivalent” to the structure(s) described in the patent for performing that function. The issue of whether two structures are identical or equivalent is for you to decide. I will explain to you later how to determine whether two structures or two sets of structures are “equivalent” to one another.

For purposes of this case, I have identified for you the structures described in the '073 Patent that perform the various functions recited in the asserted claims. These are listed in Exhibit B, along with the other definitions for the different claim terms. When I read you my definitions for certain claim terms a few moments ago, I identified the structures described in the '073 Patent for performing the relevant functions. You should apply my definition of the function and the structures described in the '073 Patent for performing it as you would apply my definition of any other claim term.

\* \* \*

It was the Court's job to determine what the claims mean. The claims only require what the Court has determined them to require, and you will find those requirements in the claim construction chart provided in your notebooks. You must disregard any argument or evidence presented by either party suggesting that the claims mean anything other than the definitions provided in this chart. Your job is to determine whether Elbit has established by a preponderance of the evidence that the claims, as defined by the Court, have been infringed.

## **7. Infringement**

I will now instruct you how to decide whether or not Hughes has infringed the '073 Patent and/or the '874 Patent. Infringement is assessed on a claim-by-claim basis. Therefore, there may be infringement as to one claim but no infringement as to another.

In this case, there are three possible ways that a claim may be infringed. The three types of infringement are called: (1) direct infringement; (2) active inducement; and (3) contributory infringement. Active inducement and contributory infringement are referred to as indirect infringement. There cannot be indirect infringement without someone else engaging in direct

infringement. To prove indirect infringement, Elbit must also prove that Hughes' indirect infringement caused direct infringement.

In this case, Elbit has alleged that Hughes has directly infringed the '073 Patent and the '874 Patent. In addition, Elbit has alleged that Hughes' customers or clients directly infringe the '073 Patent and the '874 Patent, and that Hughes is liable for actively inducing or contributing to that direct infringement by its customers or clients.

In order to prove infringement, Elbit must prove that the requirements for one or more of these types of infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that all of the requirements of one or more of each of these types of infringement have been proved.

I will now explain each of these types of infringement in more detail.

#### **7.1 Direct Infringement – Literal Infringement**

If a person makes, uses, offers to sell, or sells in the United States something that is covered by the claims of a patent without the patent owner's permission, that person is said to directly infringe the patent. To determine direct infringement, you must compare the accused product with each and every one of the requirements of the asserted claims to determine whether all of the requirements of that claim are met. A patent claim is infringed only if an accused product includes each and every element in that patent claim. If the accused product does not contain one or more of the elements recited in the claim, then that product does not infringe the claim.

If you find that the accused product or system includes each element of the claim, then that product or system infringes the claim, even if such product or system contains additional elements that are not recited in the claims.

A person may literally infringe a patent, even though in good faith the person believes that what it is doing is not an infringement of any patent, and even if it did not know of the patent. Literal infringement does not require proof that the person copied a product or the patent.

You must consider each of the asserted claims individually. You must be certain to compare each accused product or system with each claim that such product or system is alleged to infringe. Each accused product or system should be compared to the limitations recited in the asserted claims, not to any preferred or commercial embodiment of the claimed invention. If you find that Elbit has proved by a preponderance of the evidence that each and every limitation of that claim is present in an accused product system, then you must find that such product or system infringes that claim.

## **7.2 Direct Infringement – Literal Infringement of “Means-plus-function” Claim Limitations**

As I have previously explained, the asserted claims of the '073 Patent include several requirements that are in “means-plus-function” form. An accused product meets a means-plus-function requirement of a claim if: (1) it has a structure or a set of structures that performs identical function recited in the claim, and (2) that structure or set of structures is either identical or “equivalent” to one or more of the described structures that I defined earlier as performing the function of each requirement. If the accused product does not perform the specific function recited in the claim, the “means-plus-function” requirement is not met, and the accused product does not literally infringe the claim. Alternatively, even if the accused product has a structure or a set of structures that performs the function recited in the claim but the structure or set of structures is not either the same or “equivalent” to one or more of the structure(s) that I identified as being described in the '073 Patent and performing each of the claimed functions, the accused product does not literally infringe the asserted claim.

A structure or a set of structures may be found to be “equivalent” to the structure(s) I have defined as being described in the ’073 Patent if a person having ordinary skill in the field of technology of the ’073 Patent either would have considered the differences between them to be insubstantial at the time the ’073 Patent issued or if that person would have found the structure(s) performed the claimed function in substantially the same way to accomplish substantially the same result. Your job is to determine whether the accused device has a structure that is identical or equivalent to the overall structure I identified as performing the function of each requirement. In deciding whether the differences would be “insubstantial,” you may consider whether a person having an ordinary level of skill in the field of technology of the patent would have known of the interchangeability of the two structures or sets of structures. Interchangeability itself is not sufficient; in order for the structures to be considered to be interchangeable, the interchangeability of the two structures must have been known to persons of ordinary skill in that art at the time the patent issued. The fact that a structure or set of structures is known now and is “equivalent” is not enough. The structure or set of structures must also have been available at the time the ’073 Patent issued.

In this case, you will have to decide issues regarding field of technology and level of ordinary skill in the art. I will instruct you later how to decide this.

In order to prove direct infringement by literal infringement of the means-plus-function limitations in the asserted claims of the ’073 Patent, Elbit must prove the above requirements are met by the accused products by a preponderance of the evidence.

### **7.3 Indirect Infringement – Active Inducement**

Elbit alleges that Hughes is liable for infringement by actively inducing its customers to directly infringe the '073 and the '874 Patents. As with direct infringement, you must determine whether there has been active inducement on a claim-by-claim basis.

Hughes is liable for active inducement of a claim only if Elbit proves by a preponderance of the evidence:

1. that the acts are actually carried out by Hughes' customers and that Hughes' customers directly infringe that claim;
2. that Hughes took action during the time the patents were in force intending to cause the infringing acts by its customers; and
3. that Hughes was aware of the '073 and the '874 Patents and knew that the acts, if taken, would constitute infringement of those patents.

Active inducement can be activity that occurs outside of the United States. Here, Hughes may be liable for induced infringement of a claim of the '874 Patent, if Elbit proves by a preponderance of the evidence that:

1. Hughes supplies or causes to be supplied components from the United States to a place outside the United States, which make up all or a substantial portion of the invention of any one of the claims of the patents-in-suit;
2. Hughes takes action intentionally to cause its customers outside of the United States to assemble the components;
3. Hughes knows of the patent at issue, and knows that the encouraged acts constitute infringement of that patent; and



4. the encouraged acts would constitute direct infringement of the claim if they had been carried out in the United States.

Although Elbit need not prove that Hughes has directly infringed to prove indirect infringement, Elbit must prove that someone directly infringed. If there is no direct infringement by anyone, Hughes cannot have actively induced infringement of the patent.

If you find that Hughes was aware of the patents, but believed that the acts it encouraged did not infringe those patents, Hughes cannot be liable for inducement. In order to establish inducement of infringement, it is not sufficient that Hughes' customers themselves directly infringe the claims. Nor is it sufficient that Hughes was aware of the act(s) by its customers that allegedly constitute the direct infringement. Rather, in order to find inducement of infringement, you must find that Hughes specifically intended its customers to infringe the '073 or the '874 Patents. The mere fact, if true, that Hughes knew or should have known that there was a substantial risk that its customers' acts would infringe the patents-in-suit would not be sufficient for active inducement of infringement.

#### **7.4 Indirect Infringement – Contributory Infringement**

Elbit argues that Hughes is liable for contributory infringement by contributing to the direct infringement of the '073 Patent by its customers. As with direct infringement, you must determine contributory infringement on a claim-by-claim basis.

Hughes is liable for contributory infringement of a claim if Elbit proves by a preponderance of the evidence:

1. Hughes sells, offers to sell, or imports within the United States a component of a product, during the time the patent is in force;
2. the component or apparatus has no substantial, non-infringing use;

3. the component or apparatus constitutes a material part of the invention;
4. Hughes is aware of the '073 Patent and knows that the products for which the accused component has no other substantial use for may be covered by a claim of the '073 Patent; and
5. that use directly infringes the claim.

In order to prove contributory infringement, Elbit must prove that each of the above requirements is met.

### **7.5 Willful Infringement**

In this case, Elbit argues both that Hughes infringed the patents-in-suit and, further, that Hughes willfully infringed the patents-in-suit. If you have decided that Hughes has infringed either of the patents-in-suit, you must go on and address the additional issue of whether or not this infringement was willful.

If you have decided that Hughes has infringed, you must then to on to address the additional issue of whether or not this infringement was willful. You may not determine that infringement was willful just because Hughes knew of the asserted patents and infringed them. In order to show that infringement was willful, Elbit must persuade you that it is more likely than not that Hughes had knowledge of the patents and that its conduct was wanton, malicious, bad-faith, deliberate, consciously wrong, or flagrant.

Your determination of willfulness should incorporate the totality of the circumstances based on the evidence presented during this trial. If you decide that any infringement was willful, that decision should not affect any damage award you give. I will take willfulness into account later.

## **8. Invalidity**

I will now instruct you on the rules you must follow in deciding whether or not Hughes has proven that the claims of the '073 Patent is invalid. Patent invalidity is a defense to patent infringement. For a patent to be valid, the invention claimed must be new, useful, and not obvious. A patent cannot take away from people their right to use what was known or what would have been obvious when the invention was made.

That which precedes the filing date of the patent invalidates, and that which comes after infringes. Claims are given the same meaning for purposes of both validity and infringement.

Hughes must prove that a patent claim is invalid by clear and convincing evidence. However, you may consider the fact of whether any of the evidence of invalidity is new, meaning that it was not considered by the Patent Office. If evidence of invalidity is new, then you may find it is easier for Hughes to convince you that the evidence is clear and convincing proof of invalidity.

An issued patent is accorded a presumption of validity based on the presumption that the Patent Office acted correctly in issuing a patent. Each claim of a patent is presumed valid independently of the validity of the other claims.

The presumption of validity remains intact. In other words, the burden never shifts to Elbit to prove that its patents are valid.

Even though the Patent Office has allowed the claims of a patent, you have the ultimate responsibility for deciding whether the claims of the patent are valid.

The presumption of validity is not an additional hurdle to be cleared for finding invalidity. By applying the clear and convincing standard, you are already accounting for the presumption of validity.

### **8.1 Prior Art**

That which came before a patent is generally referred to as the “prior art.” Prior art may include items that were publicly known such as patents and printed publications as well as products that have been used or offered for sale, developed, that disclose the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published, or patented before the filing date of the patent application.

### **8.2 Priority Date**

The parties agree that the priority date for the '073 Patent is November 14, 1997 and the priority date for the '874 Patent is August 1, 2001. You should not consider argument or evidence as supporting an earlier priority date for Plaintiffs' '073 Patent.

### **8.3 Anticipation / Prior Art**

In order for someone to be entitled to a patent, the invention must actually be “new.” In general, inventions are new when the identical product or system has not been made, used, or disclosed before. Anticipation must be determined on a claim-by-claim basis.

Hughes contends that all asserted claims of the '073 patent are invalid because the claimed invention is anticipated.

There are many ways that Hughes can show that a patent claim was not new.

(1) An invention is not new if it was known to or used by others in the United States before the date of the invention.

(2) An invention is not new if it was already patented or described in a printed publication, anywhere in the world before the date of the invention.

(3) Elbit has lost its rights if the claimed invention was already patented or described in a printed publication, anywhere in the world by anyone else, more than a year before the

effective filing date of the application for the patent. An invention was patented by another if the other patent describes the same invention claimed by Elbit to a person having ordinary skill in the technology.

(4) An invention is not new if the claimed invention was described in a patent granted on an application for patent by another filed in the United States, or under the PCT system and designated the United States, and was published in English, and the application was filed before the date of reduction to practice or the filing date for the patent.

(5) An invention is not new if the invention was made by someone else in the United States before the invention was made by Elbit and the other person did not abandon, suppress, or conceal the invention.

(6) Elbit has lost its rights if the claimed invention was publicly used, sold, or offered for sale in the United States more than one year before the effective filing date of the application for the patent. An invention was publicly used when it was either accessible to the public or commercially exploited. An invention was sold or offered for sale when it was offered commercially and what was offered was ready to be patented, i.e., a description to one having ordinary skill in the field of the technology could have made and used the claimed invention, even if it was not yet reduced to practice.

For the claim to be invalid because it is not new, Hughes must show by clear and convincing evidence that all of the requirements of that claim were present in a single previous device or method that was known or, used, or described in a single prior art reference or system. We call these things “anticipating prior art.” To anticipate the invention, the prior art system must disclose all of the requirements of the claim, either expressly or implied to a person having ordinary

skill in the art in the technology of the invention, so that looking at that one prior art system, the person could make and use the claimed invention.

To understand how the prior art system operates, you may rely on multiple pieces of evidence that describe the same prior art system for the purpose of finding anticipation or obviousness. In other words, if you find that a single prior art system existed that meets every element of the claim, then that is enough to find the claim invalid as anticipated or obvious.

In determining whether a prior art reference or system anticipates or renders obvious the claimed invention you may not consider any argument comparing the prior art to the accused product or device.

#### **8.4 Obviousness**

Hughes also contends that the asserted claims of the '073 Patent are invalid as obvious. Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, the invention must also not have been obvious to a person of ordinary skill in the relevant field of technology of the patent at the time the invention was made.

Hughes may establish that a patent claim is invalid by showing, by clear and convincing evidence, that the claimed invention would have been obvious to persons having ordinary skill in the art in the field of the invention at the time the invention was made. In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of technology of the patent that someone would have had at the time the claimed invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

## **8.5 Written Description**

The patent law contains certain requirements for the part of the patent called the specification. Hughes contends that the patents-in-suit are invalid because the specifications do not contain an adequate written description of the invention. To succeed, Hughes must show by clear and convincing evidence that the specification fails to meet the law's requirements for written description of the invention. In the patent application process, the applicant may keep the originally filed claims, or change the claims between the time the patent application is first filed and the time a patent is issued. An applicant may amend the claims or add new claims. These changes may narrow or broaden the scope of the claims. The written description requirement ensures that the issued claims correspond to the scope of the written description that was provided in the original application.

In deciding whether the patent satisfies this written description requirement, you must consider the description from the viewpoint of a person having ordinary skill in the field of technology of the patent when the application was filed. The written description requirement is satisfied if a person having ordinary skill reading the original patent application would have recognized that it describes the full scope of the claimed invention as it is finally claimed in the issued patent and that the inventor actually possessed that full scope by the filing date of the original application.

The written description requirement may be satisfied by any combination of words, structures, figures, diagrams, formulas, etc., contained in the patent application. The full scope of a claim or any particular requirement in a claim need not be expressly disclosed in the original patent application if a person having ordinary skill in the field of technology of the patent at the

time of filing would have understood that the full scope or missing requirement is in the written description in the patent application.

#### 8.5.1 {Intentionally Left Blank}

#### **8.5.2 Level of Ordinary Skill**

In deciding what the level of ordinary skill in the field of [invention] is, you should consider all the evidence introduced at trial, including but not limited to: (1) the levels of education and experience of the inventor and other persons actively working in the field; (2) the types of problems encountered in the field; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; and (5) the sophistication of the technology.

#### **8.5.3 Scope and Content of the Prior Art**

In considering whether the claimed invention was obvious, you must first determine the scope and content of the prior art. The scope and content of prior art for deciding whether the invention was obvious includes at least prior art in the same field as the claimed invention, regardless of the problem addressed by the item or reference, and prior art from different fields that a person of ordinary skill would have considered when trying to solve the problem that is addressed by the invention.

#### **8.5.4 Differences between the Prior Art and the Claimed Invention**

You should analyze whether there are any relevant differences between the prior art and the claimed invention from the view of a person of ordinary skill in the art at the time of the invention. Your analysis must determine the impact, if any, of such differences on the obviousness or non-obviousness of the claimed invention.



### **8.5.5 Motivation to Combine**

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may but are not required to find obviousness if you find that as of the priority date of the patents-in-suit, there was a reason that would have prompted a person of ordinary skill in the field to combine the known elements in a way the claimed invention does, taking into account such factors as:

1. Whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s);
2. Whether the claimed invention provides an obvious solution to a known problem in the relevant field;
3. Whether the prior art teaches or suggests the desirability of combining elements claimed in the invention;
4. Whether the prior art teaches away from combining elements in the claimed invention;
5. Whether it would have been obvious to try the combinations of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions; and
6. Whether the change resulted more from design incentives or other market forces.

To find it rendered the invention obvious, you must find that the prior art provided a reasonable expectation of success to one of ordinary skill in the art.

In determining whether the claimed invention was obvious, consider each claim separately. Do not use hindsight, i.e., you are to consider only what was known at the time of the invention.

In other words, you should not consider what a person of ordinary skill in the art would know now or what has been learned from the teachings of Elbit's patents themselves.

#### **8.5.6 Objective Indicia of Non-Obviousness**

In making these assessments, you should take into account any objective evidence that may shed light on whether the claimed invention is obvious or not., such as:

1. Whether the invention was commercially successful as a result of the merits of the claimed invention (rather than the result of design needs or market-pressure advertising or similar activities);
2. Whether the invention satisfied a long-felt need;
3. Whether others had tried and failed to make the invention;
4. Whether others invented the invention at roughly the same time;
5. Whether others copied the invention;
6. Whether there were changes or related technologies or market needs contemporaneous with the invention;
7. Whether the invention achieved unexpected results;
8. Whether others in the field praised the invention;
9. Whether persons having ordinary skill in the field of the invention expressed surprise or disbelief regarding the invention; and
10. Whether others sought or obtained rights to the patent from the patent holder; and
11. Whether the inventor proceeded contrary to accepted wisdom in the field.

#### **9. {Intentionally Left Blank}**

## **10. Damages**

If you find that Hughes has infringed any valid claim of the patents-in-suit, you must then consider what amount of damages to award to Elbit. If you find that Hughes has not infringed any valid claim of the patent, then Elbit is not entitled to any damages.

I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win on any issue. The damages you award must be adequate to compensate Elbit for any infringement you find. Damages are not meant to punish an infringer or to set an example. Your damages award, if you reach this issue, should put Elbit in approximately the same financial position that it would have been in had the infringement not occurred.

Elbit has the burden to establish the amount of their damages by a preponderance of the evidence. Plaintiffs are not required to prove their damages with mathematical precision, [but] must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

In this case Elbit seeks damages in the form of a reasonable royalty. A reasonable royalty is defined as the money amount Elbit and Hughes would have agreed upon as a fee for Hughes' use of the invention at the time the infringement began. The damages should be no more or no less than the value of the patented invention.

The patent law does not allow you to use the value of an entire product or service, or the value of the entire market, to determine damages unless you find that Elbit's has proven by a preponderance of the evidence that the patented feature of the product drives consumer demand for the entire product or service.

## **10.1 Reasonable Royalty**

If you find that Elbit has established infringement of a valid claim, Elbit is entitled to at least a reasonable royalty to compensate them for that infringement.

### **10.1.1 Hypothetical Negotiation**

A reasonable royalty is the amount of money a willing patent owner and a willing prospective licensee would have agreed upon at the time the infringement began for a license to make, use or sell the invention. It is the royalty that would have resulted from an arm's length negotiation between a willing licensor and a willing licensee—here, Elbit (as the licensor) and Hughes (as the licensee). This is known as the “hypothetical negotiation.” Unlike in a real world negotiation, all parties to the hypothetical negotiation are presumed to believe that the patent is both infringed and valid. In considering this hypothetical negotiation, you should focus on what the expectations of the patent owner and the infringer would have been had they entered into an agreement at that time and had they acted reasonably in their negotiations.

The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation and not simply a royalty either party would have preferred. The parties agree that the date of the hypothetical negotiation between Elbit and Hughes would have been in May 2001 for the '073 patent. The parties dispute the date of hypothetical negotiation between Elbit and Hughes for the '874 Patent.

In making your determination of the amount of a reasonable royalty, it is important that you focus on the time period when Hughes first infringed the patents-in-suit and the facts that existed at that time. However, evidence of things that happened after the infringement first began may be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation.

Your determination does not depend on the actual willingness of the parties to the lawsuit to engage in such negotiations. Your focus should be on what the parties' expectations would have been had they entered into negotiations for royalties on the date of the hypothetical negotiation.

#### **10.1.2 Georgia-Pacific Factors**

In deciding what is a reasonable royalty that would have resulted from the hypothetical negotiation, you may consider the factors that the patent owner (Elbit) and the alleged infringer (Hughes) would consider in setting the amount the alleged infringer should pay. I will list for you a number of factors you may consider. They are as follows:

(1) The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty

(2) The rates paid by the licensee for the use of other patents comparable to the patent-in-suit.

(3) The nature and scope of the license, as exclusive or nonexclusive, or as restricted or nonrestricted in terms of territory or with respect to whom the manufactured product may be sold.

(4) The licensor's established policy and marketing program to maintain his or her patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.

(5) The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.

(6) The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his nonpatented items, and the extent of such derivative or convoyed sales.

(7) The duration of the patent and the term of the license.

(8) The established profitability of the product made under the patents, its commercial success, and its current popularity.

(9) The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.

(10) The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.

(11) The extent to which the infringer has made use of the invention and any evidence probative of the value of that use.

(12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable business to allow for the use of the invention or analogous inventions.

(13) The portion of the realizable profits that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

(14) The opinion and testimony of qualified experts.

(15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty the alleged infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people. In determining a reasonable royalty, you may also consider whether or not Hughes had a commercially acceptable non-infringing alternative to taking a license from the patent holder that was available at the time of the hypothetical negotiation and whether that would have affected the reasonable royalty the parties would have agreed upon.

## **10.2 License Comparability**

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for rights to the patents in question or for rights to similar technologies. A license agreement need not be perfectly comparable to the hypothetical license

that would have been negotiated between Elbit and Hughes in order for you to consider it. However, if you choose to rely upon evidence from any license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between Elbit and Hughes when you make your reasonable royalty determination, including the type of technology licensed, whether the license contained a cross-license and/or similar patent protections, whether the license contained any value related to a release of liability, the date when the license was entered, the financial or economic conditions of the parties at the time the parties entered into the license, the extent of use, if any, of any particular licensed patents, the number of patents involved in the license, whether or not the license covered foreign intellectual property rights, the extent to which litigation may have affected the license and whether contrary to the hypothetical negotiation the licensee in the real world license, at the time of entering the license, believed that the patents were either not infringed or were invalid.

### **10.3 Use of Non-Infringing Alternatives**

In determining a reasonable royalty, you may also consider evidence concerning the availability and cost of non-infringing alternatives to the patented invention. A non-infringing alternative must be an acceptable product that is licensed under the patent or that does not infringe the patent.

### **10.4 Apportionment for Royalty**

Damages for patent infringement must be apportioned to reflect the value the invention contributes to the accused products or features and must not include value from the accused products or features that is not attributable to the patent.

### **10.5 Consider All Evidence**

In considering the evidence of a reasonable royalty, you are not required to accept one specific figure or another for the reasonable royalty. You are entitled to determine what you consider to be a reasonable royalty based upon your consideration of all of the evidence presented by the parties whether that evidence is of a specific figure or a range of figures.

### **10.6 Lump Sum versus Running Royalty**

A royalty may be calculated as a one-time lump sum payment or a running royalty. A one-time lump sum payment that the infringer would have paid at the time of the hypothetical negotiation for a license covers all sales of the licensed product, both past and future. This differs from payment of a running royalty because, with a running royalty, the licensee pays based on the actual licensed products it sells. When a one-time lump sum is paid, the infringer pays a single price for a license covering both past and future infringing sales. It is up to you, based on the evidence, to decide what type of royalty, if any, is appropriate in this case for the life of the patent.

### **10.7 When Damages Begin**

In determining the amount of damages, you must determine when the damages began. The parties do not agree on that date, and it is up to you to determine what that date is. If you find that Elbit sells a patented article that includes the claimed invention in the United States, you must determine whether Elbit has “marked” that product with the patent number. “Marking” is placing either the word “patent” or the abbreviation “pat.” with the patent’s number on substantially all of the products that include the patented invention. Elbit has the burden of establishing that it substantially complied with the marking requirement. This means Elbit must show that it marked substantially all of the products it made, offered for sale, or sold under the patents.



If Elbit has not marked that article with the patent number, you must determine the date that Hughes received actual notice of the '073 and '874 Patents and the specific product alleged to infringe. Actual notice means that patent holder or its agent communicated to alleged infringer a specific charge of infringement of the '073 and '874 Patents by a specific accused product or device or group of products. The filing of the complaint in this case qualified as actual notice, so the damages period begins no later than the date the complaint was filed, January 21, 2015. Elbit has the burden of establishing that it is more probable than not that Hughes received notice of infringement on a date earlier than the filing of the complaint. If you find that Elbit did not sell a patented article that includes the claimed invention in the United States, damages begin without the requirement for actual notice. In any case you should not award damages for any infringement occurring prior to six years before the lawsuit was brought, January 21, 2009.

#### **11. Instructions for Deliberations**

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice or public opinion. All parties expect that you will carefully and impartially consider all of the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences.

It is your sworn duty as jurors to discuss the case with one another in an effort to reach agreement if you can do so. Each of you must decide the case for yourself, but only after full consideration of the evidence with the other members of the jury. While you are discussing the case, do not hesitate to re-examine your own opinion and change your mind if you become convinced that you are wrong. However, do not give up your honest beliefs solely because the others think differently, or merely to finish the case.

Remember that in a very real way you are the judges of the facts. Your only interest is to seek the truth from the evidence in the case. You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. Corporations and businesses are entitled to the same fair trial as a private individual. All persons, including corporations, both foreign and domestic, stand equal before the law, regardless of size or who owns them or where they are located, and they are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you may take this charge with you, as well as the exhibits which the Court has admitted into evidence. You will select your foreperson and conduct your deliberations. If you recess during your deliberations, please follow all of the instructions that the Court has given you about your conduct during the trial.

After you have reached your verdict, your foreperson is to fill in on the form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me.

Any notes that you may have taken during the trial, are only aids to your memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. Your notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time during your deliberations, please give a written message or a question to the Court Security Officer, who will bring it to me. I will then respond as promptly as possible, either in writing or by having you brought into the courtroom so

that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

And then finally, after you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise.

You may now retire to the jury room to deliberate.